

IP-022.ST25.txt
SEQUENCE LISTING

<110> Du, Chunying
Yang, Qiheng

<120> Method and Composition for Cleaving IAPs

<130> 40716(IP-022)

<160> 83

<170> PatentIn version 3.2

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IP-022.ST25.txt

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IP-022.ST25.txt

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IP-022.ST25.txt

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IP-022.ST25.txt

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IP-022.ST25.txt

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cttgctgaac tacagcttcg agaaccaagc tttcccgatg ttcagcatgg tgtactcatc	780
cataaagtca tcctgggctc ccctgcacac cgggctggtc tgcggcctgg tgatgtgatt	840
ttggccattg gggagcagat ggtacaaaat gctgaagatg tttatgaagc tgttcgaacc	900
caatcccagt tggcagtgc gatccggcgg ggacgagaaa cactgacctt atatgtgacc	960
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<210> 13
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 <212> DNA
 <213> Homo sapiens

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 <223> n = Cleaved Nucleic Acids

<220>
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 <223> n = t, c

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 <223> n = t, c

<220>
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 <223> n = a, t, g, c

<220>
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 <223> n = t, g

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IP-022.ST25.txt

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gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc	240
gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg	300
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ccttctgatc gtcttcgaga gtttctgcat cgtggggaaa agaagaattc ctcctccgga	660
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cttgctgaac tacagcttcg agaaccaagc tttcccgatg ttcagcatgg tgtactcatc	780
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 <212> DNA
 <213> Homo sapiens

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cctatctcga acggctcagg attcgtggtg gctgccgatg ggctcattgt caccaacgcc	180
catgtggtgg ctgatcggcg cagagtccgt gtgagactgc taagcggcga cacgtatgag	240
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gagcctctcc ccacgtgcc tctgggacgc tcagctgatg tccggcaagg ggagtttggt	360
gttgccatgg gaagtccctt tgcactgcag aacacgatca catccggcat tgttagctct	420
gctcagcgtc cagccagaga cctgggactc ccccaaacca atgtggaata cattcaaact	480
gatgcagcta ttgattttgg aaactctgga ggtcccctgg ttaacctgga tggggagggtg	540
attggagtga acaccatgaa ggtcacagct ggaatctcct ttgccatccc ttctgatcgt	600
cttcgagagt ttctgcatcg tggggaaaag aagaattcct cctccggaat cagtgggtcc	660
cag	663

IP-022.ST25.txt

<210> 15
 <211> 675
 <212> DNA
 <213> Homo sapiens

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 <222> (193)..(193)
 <223> n = t, c

<220>
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 <222> (195)..(195)
 <223> n = t, c

<220>
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 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
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 <222> (519)..(519)
 <223> n = a, t, g, c

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 ggccgcgagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt 180
 gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc 240
 gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg 300
 attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa 360
 ggggagtttg ttgttgccat gggaagtccc ttgactgc agaacacgat cacatccggc 420
 attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa 480
 tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccct ggttaacctg 540
 gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc 600
 ccttctgatc gtcttcgaga gtttctgcat cgtggggaaa agaagaattc ctcctccgga 660
 atcagtgggt cccag 675

<210> 16
 <211> 675
 <212> DNA
 <213> Homo sapiens

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<220>
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 <223> n = Cleaved Nucleic Acids

<220>
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 <222> (193)..(193)
 <223> n = t, c

<220>
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 <222> (195)..(195)
 <223> n = t, c

<220>
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 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
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 <222> (519)..(519)
 <223> n=a, t, g, c

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 gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc 240
 gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg 300
 attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa 360
 ggggagtttg ttgttgccat gggaagtccc tttgcactgc agaacacgat cacatccggc 420
 attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa 480
 tacattcaaa ctgatgcagc tattgatttt ggaaacagng gaggtcccct ggttaacctg 540
 gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc 600
 ccttctgatc gtcttcgaga gtttctgcat cgtggggaaa agaagaattc ctcctccgga 660
 atcagtgggt cccag 675

<210> 17
 <211> 636
 <212> DNA
 <213> Homo sapiens

<400> 17
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 ggccgcgagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt 180

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gacacgtatg aggccgtggt cacagctgtg gatcccgtgg cagacatcgc aacgctgagg	300
attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa	360
ggggagtttg ttgttgccat gggaagtccc tttgactgc agaacacgat cacatccggc	420
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tacattcaaa ctgatgcagc tattgatttt ggaaactctg gaggtcccct ggttaacctg	540
gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc	600
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<210> 18
 <211> 636
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 <213> Homo sapiens

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 <223> n = t, c

<220>
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 <223> n = t, c

<220>
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 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
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 <223> n = a, t, g, c

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ggccgcgagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt	180
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gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg	300
attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa	360
ggggagtttg ttgttgccat gggaagtccc tttgactgc agaacacgat cacatccggc	420
attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa	480
tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccct ggttaacctg	540

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<210> 19
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 <212> DNA
 <213> Homo sapiens

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 <223> n = t, c

<220>
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 <222> (195)..(195)
 <223> n = t, c

<220>
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 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
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 <223> n = a, t, g, c

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 gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc 240
 gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg 300
 attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa 360
 ggggagtttg ttgttgccat gggaagtccc tttgcactgc agaacacgat cacatccggc 420
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 <212> DNA
 <213> Homo sapiens

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<222> (194)..(194)
 <223> n = t, g, c

<220>
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 <222> (195)..(195)
 <223> n = a, t, g, c

<220>
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 <222> (284)..(284)
 <223> n = t, g, c

<220>
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 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
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 <222> (519)..(519)
 <223> n = a, t, g, c

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 gtcaccaacg ccgnngtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc 240
 gacacgtatg aggccgtggt cacagctgtg gatcccgtgg cagnnatcgc aacgctgagg 300
 attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa 360
 ggggagtttg ttgttgccat gggaagtccc tttgactgc agaacacgat cacatccggc 420
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 tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccct ggtaacctg 540
 gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc 600
 ccttctgatc gtcttcgaga gtttctgcat cgtggg 636

<210> 21
 <211> 636
 <212> DNA
 <213> Homo sapiens

<220>
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 <223> n = a, t, g, c

<220>
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 <222> (283)..(285)
 <223> n = a, t, g, c

IP-022.ST25.txt

<220>
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<222> (517)..(517)
<223> n = g, c

<220>
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<222> (518)..(519)
<223> n = a, t, g, c

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gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc 600
ccttctgatc gtcttcgaga gtttctgcat cgtggg 636

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<211> 624
<212> DNA
<213> Homo sapiens

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<210> 23
 <211> 636
 <212> DNA
 <213> Homo sapiens

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<220>
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 <222> (193)..(193)
 <223> n = t, c

<220>
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 <222> (195)..(195)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
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 <222> (519)..(519)
 <223> n = a, t, g, c

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 ggccgcgagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt 180
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 ccttctgatc gtcttcgaga gtttctgcat cgtggg 636

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 <212> DNA
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 <222> (193)..(193)
 <223> n = t, c

<220>
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 <222> (195)..(195)
 <223> n = t, c

<220>
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 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
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 <222> (519)..(519)
 <223> n = a, t, g, c

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 gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc 240
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 <211> 630
 <212> DNA
 <213> Homo sapiens

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 gtcaccaacg cccatgtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc 240
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attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa	480
tacattcaaa ctgatgcagc tattgatttt ggaaactctg gaggtcccct ggttaacctg	540
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<210> 26
 <211> 630
 <212> DNA
 <213> Homo sapiens

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<220>
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 <222> (195)..(195)
 <223> n = t, c

<220>
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 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
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 <222> (519)..(519)
 <223> n = a, t, g, c

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gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg	300
attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa	360
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tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccct ggttaacctg	540
gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc	600
ccttctgatc gtcttcgaga gtttctgcat	630

<210> 27
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (193)..(193)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (195)..(195)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
 <221> misc_feature
 <222> (519)..(519)
 <223> n=a, t, g, c

<400> 27
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 gtggagaaga cagcacctgc cgtgggtctat atcgagatcc tggaccggca ccctttcttg 120
 ggccgcgagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt 180
 gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc 240
 gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg 300
 attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa 360
 ggggagtttg ttgttgccat gggaagtccc tttgactgc agaacacgat cacatccggc 420
 attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa 480
 tacattcaaa ctgatgcagc tattgatttt ggaaacagng gaggtcccct ggttaacctg 540
 gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc 600
 ctttctgatc gtcttcgaga gtttctgcat 630

<210> 28
 <211> 630
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (194)..(194)
 <223> n = t, g, c

<220>
 <221> misc_feature

<222> (195)..(195)
 <223> n = a, t, g, c

<220>
 <221> misc_feature
 <222> (284)..(284)
 <223> n = t, g, c

<220>
 <221> misc_feature
 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
 <221> misc_feature
 <222> (519)..(519)
 <223> n = a, t, g, c

<400> 28
 gccgtcccta gcccgccgcc cgcttctccc cggagtcagt acaacttcat cgcagatgtg 60
 gtggagaaga cagcacctgc cgtgggtctat atcgagatcc tggaccggca ccctttcttg 120
 ggccgcgagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt 180
 gtcaccaacg ccgnngtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc 240
 gacacgtatg aggccgtggt cacagctgtg gatcccgtgg cagnnatcgc aacgctgagg 300
 attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa 360
 ggggagtttg ttgttgccat gggaagtccc tttgactgc agaacacgat cacatccggc 420
 attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa 480
 tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccct ggttaacctg 540
 gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc 600
 ctttctgatc gtcttcgaga gtttctgcat 630

<210> 29
 <211> 630
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (193)..(195)
 <223> n = a, t, g, c

<220>
 <221> misc_feature
 <222> (283)..(285)
 <223> n = a, t, g, c

<220>
 <221> misc_feature
 <222> (517)..(517)
 <223> n = g, c

IP-022.ST25.txt

<220>
 <221> misc_feature
 <222> (518)..(519)
 <223> n = a, t, g, c

<400> 29
 gccgtcccta gcccgccgcc cgcttctccc cggagtcagt acaacttcat cgcagatgtg 60
 gtggagaaga cagcacctgc cgtggtctat atcgagatcc tggaccggca ccctttcttg 120
 ggccgcgagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt 180
 gtcaccaacg ccnnngtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc 240
 gacacgtatg aggccgtggt cacagctgtg gatcccgtgg cannnatcgc aacgctgagg 300
 attcagacta aggagcctct cccacgctg cctctggggac gctcagctga tgtccggcaa 360
 ggggagtttg ttgttgccat gggaagtccc tttgcactgc agaacacgat cacatccggc 420
 attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa 480
 tacattcaaa ctgatgcagc tattgatttt ggaaacnnng gaggtcccct ggttaacctg 540
 gatggggagg tgattggagt gaacaccatg aagggtcacag ctggaatctc ctttgccatc 600
 ccttctgatc gtcttcgaga gtttctgcat 630

<210> 30
 <211> 636
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (160)..(162)
 <223> n = Deleted Nucleic Acids

<220>
 <221> misc_feature
 <222> (193)..(193)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (195)..(195)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
 <221> misc_feature
 <222> (519)..(519)
 <223> n = a, t, g, c

<400> 30
 gccgtcccta gcccgccgcc cgcttctccc cggagtcagt acaacttcat cgcagatgtg 60

IP-022.ST25.txt

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gtggagaaga cagcacctgc cgtggtctat atcgagatcc tggaccggca ccctttcttg 120
ggccgcgagg tccctatctc gaacggctca ggattcgtgn nngctgccga tgggctcatt 180
gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc 240
gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg 300
attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa 360
ggggagtttg ttgttgccat ggggaagtcct tttgcactgc agaacacgat cacatccggc 420
attgttagct ctgctcagcg tccagccaga gacctgggac tcccccaaac caatgtggaa 480
tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccct ggttaacctg 540
gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc 600
ccttctgatc gtcttcgaga gtttctgcat cgtggg 636

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<210> 31
<211> 636
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> (193)..(193)
<223> n = t, c

```

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<220>
<221> misc_feature
<222> (195)..(195)
<223> n = t, c

```

```

<220>
<221> misc_feature
<222> (229)..(231)
<223> n = Deleted Nucleic Acids

```

```

<220>
<221> misc_feature
<222> (285)..(285)
<223> n = a, t, g, c

```

```

<220>
<221> misc_feature
<222> (519)..(519)
<223> n = a, t, g, c

```

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<400> 31
gccgtcccta gcccgccgcc cgcttctccc cggagtcagt acaacttcat cgcagatgtg 60
gtggagaaga cagcacctgc cgtggtctat atcgagatcc tggaccggca ccctttcttg 120
ggccgcgagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt 180
gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagann nctaagcggc 240
gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg 300

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IP-022.ST25.txt

attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa	360
ggggagtttg ttgttgccat ggggaagtcct tttgactgc agaacacgat cacatccggc	420
attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa	480
tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccct ggttaacctg	540
gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc	600
ccttctgatc gtcttcgaga gtttctgcat cgtggg	636

<210> 32
 <211> 636
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (193)..(193)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (195)..(195)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
 <221> misc_feature
 <222> (370)..(372)
 <223> n = Deleted Nucleic Acids

<220>
 <221> misc_feature
 <222> (519)..(519)
 <223> n = t, g

<400> 32 gccgtcccta gcccgccgcc cgcttctccc cgagtcagt acaacttcat cgcagatgtg	60
gtggagaaga cagcacctgc cgtggtctat atcgagatcc tggaccggca ccctttcttg	120
ggccgagagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt	180
gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc	240
gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg	300
attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa	360
ggggagtttn nngttgccat ggggaagtcct tttgactgc agaacacgat cacatccggc	420
attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa	480
tacattcaaa ctgatgcagc tattgatttt ggaaacagng gaggtcccct ggttaacctg	540

IP-022.ST25.txt

gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc 600
ccttctgatc gtcttcgaga gtttctgcat cgtggg 636

<210> 33
<211> 636
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (193)..(193)
<223> n = t, c

<220>
<221> misc_feature
<222> (195)..(195)
<223> n = t, c

<220>
<221> misc_feature
<222> (285)..(285)
<223> n = a, t, g, c

<220>
<221> misc_feature
<222> (519)..(519)
<223> n = a, t, g, c

<220>
<221> misc_feature
<222> (530)..(532)
<223> n = Deleted Nucleic Acids

<400> 33
gccgtcccta gcccgccgcc cgcttctccc cggagtcagt acaacttcat cgcagatgtg 60
gtggagaaga cagcacctgc cgtggtctat atcgagatcc tggaccggca ccctttcttg 120
ggccgcgagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt 180
gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc 240
gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg 300
attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa 360
ggggagtttg ttgttgccat gggaagtccc tttgactgc agaacacgat cacatccggc 420
attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa 480
tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccn nnttaacctg 540
gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc 600
ccttctgatc gtcttcgaga gtttctgcat cgtggg 636

<210> 34
<211> 618
<212> DNA

<213> Homo sapiens

<400> 34

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ccgccgcccg cttctccccg gagtcagtac aacttcatcg cagatgtggt ggagaagaca      60
gcacctgccg tggctctatat cgagatcctg gaccggcacc ctttcttggg ccgcgaggtc      120
cctatctcga acggctcagg attcgtggtg gctgccgatg ggctcattgt caccaacgcc      180
catgtggtgg ctgatcggcg cagagtccgt gtgagactgc taagcggcga cacgtatgag      240
gccgtggtca cagctgtgga tcccgtggca gacatcgcaa cgctgaggat tcagactaag      300
gagcctctcc ccacgtgcc tctgggacgc tcagctgatg tccggcaagg ggagtttggt      360
gttgccatgg gaagtccctt tgcactgcag aacacgatca catccggcat tgtagctct      420
gctcagcgtc cagccagaga cctgggactc ccccaaacca atgtggaata cattcaaaact      480
gatgcagcta ttgattttgg aaactctgga ggtcccctgg ttaacctgga tggggagggtg      540
attggagtga acaccatgaa ggtcacagct ggaatctcct ttgccatccc ttctgatcgt      600
cttcgagagt ttctgcat                                     618

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<210> 35

<211> 630

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(12)

<223> n = Cleaved Nucleic Acids

<220>

<221> misc_feature

<222> (193)..(193)

<223> n = t, c

<220>

<221> misc_feature

<222> (195)..(195)

<223> n = t, c

<220>

<221> misc_feature

<222> (285)..(285)

<223> n = a, t, g, c

<220>

<221> misc_feature

<222> (519)..(519)

<223> n = a, t, g, c

<400> 35

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nnnnnnnnnn nnccgccgcc cgcttctccc cggagtcagt acaacttcat cgcagatgtg      60
gtggagaaga cagcacctgc cgtggtctat atcgagatcc tggaccggca ccctttcttg      120
ggccgcgagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt      180

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IP-022.ST25.txt

gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc	240
gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg	300
attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa	360
ggggagtttg ttgttgccat gggaagtccc tttgactgc agaacacgat cacatccggc	420
attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa	480
tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccct ggttaacctg	540
gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc	600
ccttctgatc gtcttcgaga gtttctgcat	630

<210> 36
 <211> 636
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (1)..(12)
 <223> n = Cleaved Nucleic Acids

<220>
 <221> misc_feature
 <222> (160)..(162)
 <223> n = Deleted Nucleic Acids

<220>
 <221> misc_feature
 <222> (193)..(193)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (195)..(195)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
 <221> misc_feature
 <222> (519)..(519)
 <223> n = a, t, g, c

<400> 36 nnnnnnnnnn nnccgccgcc cgcttctccc cggagtcagt acaacttcat cgcagatgtg	60
gtggagaaga cagcacctgc cgtgggtctat atcgagatcc tggaccggca ccctttcttg	120
ggccgcgagg tccctatctc gaacggctca ggattcgtgn nngctgccga tgggctcatt	180
gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc	240

IP-022.ST25.txt

gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg	300
attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa	360
ggggagtttg ttgttgccat gggaagtccc ttgactgc agaacacgat cacatccggc	420
attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa	480
tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccct ggttaacctg	540
gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc	600
ccttctgatc gtcttcgaga gtttctgcat cgtggg	636

<210> 37
 <211> 636
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (1)..(12)
 <223> n = Cleaved Nucleic Acids

<220>
 <221> misc_feature
 <222> (193)..(193)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (195)..(195)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (229)..(231)
 <223> n = Deleted Nucleic Acids

<220>
 <221> misc_feature
 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
 <221> misc_feature
 <222> (519)..(519)
 <223> n = a, t, g, c

<400> 37 nnnnnnnnnn nnccgccgcc cgcttctccc cggagtcagt acaacttcat cgcagatgtg	60
gtggagaaga cagcacctgc cgtgggtctat atcgagatcc tggaccggca ccctttcttg	120
ggccgcgagg tccctatctc gaacgggtca ggattcgtgg tggctgccga tgggctcatt	180
gtcaccaacg ccnangtggg ggctgatcgg cgcagagtcc gtgtgagann nctaagcggc	240
gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg	300
attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa	360

IP-022.ST25.txt

ggggagtttg ttgttgccat gggaagtccc tttgactgc agaacacgat cacatccggc	420
attgttagct ctgctcagcg tccagccaga gacctgggac tccccaaac caatgtggaa	480
tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccct ggtaaacctg	540
gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc	600
ccttctgatc gtcttcgaga gtttctgcat cgtggg	636

<210> 38
 <211> 636
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (1)..(12)
 <223> n = Cleaved Nucleic Acids

<220>
 <221> misc_feature
 <222> (193)..(193)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (195)..(195)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
 <221> misc_feature
 <222> (370)..(372)
 <223> n = Deleted Nucleic Acids

<220>
 <221> misc_feature
 <222> (519)..(519)
 <223> n = a, t, g, c

<400> 38 nnnnnnnnnn nnccgccc cgcttctccc cggagtcagt acaacttcat cgcagatgtg	60
gtggagaaga cagcacctgc cgtggtctat atcgagatcc tggaccggca ccctttcttg	120
ggccgagagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt	180
gtcaccaacg ccanagtggg ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc	240
gacacgtatg aggccgtggg cacagctgtg gatcccgtgg caganatcgc aacgctgagg	300
attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa	360
ggggagtttn nngttgcat gggaagtccc tttgactgc agaacacgat cacatccggc	420

attgttagct ctgctcagcg tccagccaga gacctgggac tcccccaaac caatgtggaa	480
tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccct ggtaaacctg	540
gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc	600
ccttctgatc gtcttcgaga gtttctgcat cgtggg	636

<210> 39
 <211> 636
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (1)..(12)
 <223> n = Cleaved Nucleic Acids

<220>
 <221> misc_feature
 <222> (193)..(193)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (195)..(195)
 <223> n = t, c

<220>
 <221> misc_feature
 <222> (285)..(285)
 <223> n = a, t, g, c

<220>
 <221> misc_feature
 <222> (519)..(519)
 <223> n = a, t, g, c

<220>
 <221> misc_feature
 <222> (530)..(532)
 <223> n = Deleted Nucleic Acids

<400> 39 nnnnnnnnnn nnccgccgcc cgcttctccc cggagtcagt acaacttcat cgcagatgtg	60
gtggagaaga cagcacctgc cgtggtctat atcgagatcc tggaccggca ccctttcttg	120
ggccgcgagg tccctatctc gaacggctca ggattcgtgg tggctgccga tgggctcatt	180
gtcaccaacg ccnangtggt ggctgatcgg cgcagagtcc gtgtgagact gctaagcggc	240
gacacgtatg aggccgtggt cacagctgtg gatcccgtgg caganatcgc aacgctgagg	300
attcagacta aggagcctct cccacgctg cctctgggac gctcagctga tgtccggcaa	360
ggggagtttg ttgttgccat gggaagtccc tttgcactgc agaacacgat cacatccggc	420
attgttagct ctgctcagcg tccagccaga gacctgggac tcccccaaac caatgtggaa	480
tacattcaaa ctgatgcagc tattgatttt ggaaactcng gaggtcccn nnttaacctg	540

IP-022.ST25.txt

gatggggagg tgattggagt gaacaccatg aaggtcacag ctggaatctc ctttgccatc 600
ccttctgatc gtcttcgaga gtttctgcat cgtggg 636

<210> 40
<211> 300
<212> DNA
<213> Homo sapiens

<400> 40
cggcgctaca ttggggtgat gatgctgacc ctgagtccca gcaccccttg tgaactacag 60
cttcgagaac caagctttcc cgatgttcag catggtgtac tcatccataa agtcatcctg 120
ggctccccctg cacaccgggc tggctctgcgg cctgggtgatg tgattttggc cattggggag 180
cagatggtac aaaatgctga agatgtttat gaagctgttc gaaccaatc ccagttggca 240
gtgcagatcc ggcggggacg agaaacactg accttatatg tgaccctga gggtcacagaa 300

<210> 41
<211> 12
<212> DNA
<213> Homo sapiens

<400> 41
gccgtcccta gc 12

<210> 42
<211> 2589
<212> DNA
<213> Homo sapiens

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Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

His Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Asp Ile
 85 90 95

IP-022.ST25.txt

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
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Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Ser Gly Gly Pro
165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His Arg Gly Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser
210 215 220

Gln Arg Arg Tyr Ile Gly Val Met Met Leu Thr Leu Ser Pro Ser Ile
225 230 235 240

Leu Ala Glu Leu Gln Leu Arg Glu Pro Ser Phe Pro Asp Val Gln His
245 250 255

Gly Val Leu Ile His Lys Val Ile Leu Gly Ser Pro Ala His Arg Ala
260 265 270

Gly Leu Arg Pro Gly Asp Val Ile Leu Ala Ile Gly Glu Gln Met Val
275 280 285

Gln Asn Ala Glu Asp Val Tyr Glu Ala Val Arg Thr Gln Ser Gln Leu
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Ala Val Gln Ile Arg Arg Gly Arg Glu Thr Leu Thr Leu Tyr Val Thr
305 310 315 320

Pro Glu Val Thr Glu
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Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
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Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175

IP-022.ST25.txt

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His Arg Gly Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser
210 215 220

Gln Arg Arg Tyr Ile Gly Val Met Met Leu Thr Leu Ser Pro Ser Ile
225 230 235 240

Leu Ala Glu Leu Gln Leu Arg Glu Pro Ser Phe Pro Asp Val Gln His
245 250 255

Gly Val Leu Ile His Lys Val Ile Leu Gly Ser Pro Ala His Arg Ala
260 265 270

Gly Leu Arg Pro Gly Asp Val Ile Leu Ala Ile Gly Glu Gln Met Val
275 280 285

Gln Asn Ala Glu Asp Val Tyr Glu Ala Val Arg Thr Gln Ser Gln Leu
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Pro Glu Val Thr Glu
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 Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45
 Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60
 Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80
 Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95
 Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110
 Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125
 Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140
 Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160
 Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175
 Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 180 185 190
 Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
 195 200 205
 Leu His Arg Gly Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser
 210 215 220
 Gln Arg Arg Tyr Ile Gly Val Met Met Leu Thr Leu Ser Pro Ser Ile
 225 230 235 240

IP-022.ST25.txt
Leu Ala Glu Leu Gln Leu Arg Glu Pro Ser Phe Pro Asp Val Gln His
245 250 255

Gly Val Leu Ile His Lys Val Ile Leu Gly Ser Pro Ala His Arg Ala
260 265 270

Gly Leu Arg Pro Gly Asp Val Ile Leu Ala Ile Gly Glu Gln Met Val
275 280 285

Gln Asn Ala Glu Asp Val Tyr Glu Ala Val Arg Thr Gln Ser Gln Leu
290 295 300

Ala Val Gln Ile Arg Arg Gly Arg Glu Thr Leu Thr Leu Tyr Val Thr
305 310 315 320

Pro Glu Val Thr Glu
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Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
Page 41

50

55

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His Arg Gly Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser
210 215 220

Gln Arg Arg Tyr Ile Gly Val Met Met Leu Thr Leu Ser Pro Ser Ile
225 230 235 240

Leu Ala Glu Leu Gln Leu Arg Glu Pro Ser Phe Pro Asp Val Gln His
245 250 255

Gly Val Leu Ile His Lys Val Ile Leu Gly Ser Pro Ala His Arg Ala
260 265 270

Gly Leu Arg Pro Gly Asp Val Ile Leu Ala Ile Gly Glu Gln Met Val
275 280 285

Gln Asn Ala Glu Asp Val Tyr Glu Ala Val Arg Thr Gln Ser Gln Leu
290 295 300

Ala Val Gln Ile Arg Arg Gly Arg Glu Thr Leu Thr Leu Tyr Val Thr
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Pro Glu Val Thr Glu
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 20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

His Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Asp Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Ser Gly Gly Pro
 165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
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Leu His Arg Gly Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser
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Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
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Leu His Arg Gly Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser
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Gln
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Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30

IP-022.ST25.txt

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His Arg Gly Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser
210 215 220

Gln
225

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Page 46

Pro, Gln, Arg, Ser, Thr, Val, Trp, Tyr

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1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

IP-022.ST25.txt

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His Arg Gly Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser
210 215 220

Gln
225

<210> 52
<211> 321
<212> PRT
<213> Homo sapiens

<400> 52

Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe Ile Ala Asp Val
1 5 10 15

Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu Ile Leu Asp Arg
20 25 30

His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn Gly Ser Gly Phe
35 40 45

Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala His Val Val Ala
50 55 60

Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly Asp Thr Tyr Glu
65 70 75 80

Ala Val Val Thr Ala Val Asp Pro Val Ala Asp Ile Ala Thr Leu Arg
85 90 95

Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu Gly Arg Ser Ala
100 105 110

Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly Ser Pro Phe Ala
115 120 125

Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser Ala Gln Arg Pro
130 135 140

Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu Tyr Ile Gln Thr
145 150 155 160

Asp Ala Ala Ile Asp Phe Gly Asn Ser Gly Gly Pro Leu Val Asn Leu
165 170 175

IP-022.ST25.txt

Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val Thr Ala Gly Ile
180 185 190

Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe Leu His Arg Gly
195 200 205

Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser Gln Arg Arg Tyr
210 215 220

Ile Gly Val Met Met Leu Thr Leu Ser Pro Ser Ile Leu Ala Glu Leu
225 230 235 240

Gln Leu Arg Glu Pro Ser Phe Pro Asp Val Gln His Gly Val Leu Ile
245 250 255

His Lys Val Ile Leu Gly Ser Pro Ala His Arg Ala Gly Leu Arg Pro
260 265 270

Gly Asp Val Ile Leu Ala Ile Gly Glu Gln Met Val Gln Asn Ala Glu
275 280 285

Asp Val Tyr Glu Ala Val Arg Thr Gln Ser Gln Leu Ala Val Gln Ile
290 295 300

Arg Arg Gly Arg Glu Thr Leu Thr Leu Tyr Val Thr Pro Glu Val Thr
305 310 315 320

Glu

<210> 53
<211> 325
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa = Cleaved Amino Acids

<220>
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<223> Xaa = His, Lys, Arg, Phe, Tyr, Trp

<220>
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<223> Xaa = Asp, Glu, Lys, His, Arg

<220>

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 <223> Xaa = Ser

<400> 53

Xaa Xaa Xaa Xaa Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
 1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
 195 200 205

Leu His Arg Gly Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser
 210 215 220

Gln Arg Arg Tyr Ile Gly Val Met Met Leu Thr Leu Ser Pro Ser Ile
 Page 50

225 230 235 240

Leu Ala Glu Leu Gln₂₄₅ Leu Arg Glu Pro Ser₂₅₀ Phe Pro Asp Val Gln₂₅₅ His

Gly Val Leu Ile₂₆₀ His Lys Val Ile₂₆₅ Leu Gly Ser Pro Ala His₂₇₀ Arg Ala

Gly Leu Arg₂₇₅ Pro Gly Asp Val Ile₂₈₀ Leu Ala Ile Gly Glu₂₈₅ Gln Met Val

Gln Asn₂₉₀ Ala Glu Asp Val Tyr₂₉₅ Glu Ala Val Arg Thr₃₀₀ Gln Ser Gln Leu

Ala Val Gln Ile Arg Arg₃₁₀ Gly Arg Glu Thr Leu₃₁₅ Thr Leu Tyr Val Thr₃₂₀

Pro Glu Val Thr Glu₃₂₅

<210> 54
<211> 221
<212> PRT
<213> Homo sapiens

<400> 54

Pro Pro Pro Ala Ser₅ Pro Arg Ser Gln Tyr₁₀ Asn Phe Ile Ala Asp₁₅ Val

Val Glu Lys Thr₂₀ Ala Pro Ala Val Val₂₅ Tyr Ile Glu Ile Leu₃₀ Asp Arg

His Pro Phe₃₅ Leu Gly Arg Glu Val₄₀ Pro Ile Ser Asn Gly₄₅ Ser Gly Phe

Val Val Ala Ala Asp Gly Leu₅₅ Ile Val Thr Asn Ala₆₀ His Val Val Ala

Asp Arg Arg Arg Val Arg₇₀ Val Arg Leu Leu Ser₇₅ Gly Asp Thr Tyr Glu₈₀

Ala Val Val Thr Ala₈₅ Val Asp Pro Val Ala₉₀ Asp Ile Ala Thr Leu₉₅ Arg

Ile Gln Thr Lys₁₀₀ Glu Pro Leu Pro Thr₁₀₅ Leu Pro Leu Gly Arg₁₁₀ Ser Ala

Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly Ser Pro Phe Ala

115

120

125

Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser Ala Gln Arg Pro
 130 135 140

Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu Tyr Ile Gln Thr
 145 150 155 160

Asp Ala Ala Ile Asp Phe Gly Asn Ser Gly Gly Pro Leu Val Asn Leu
 165 170 175

Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val Thr Ala Gly Ile
 180 185 190

Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe Leu His Arg Gly
 195 200 205

Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser Gln
 210 215 220

<210> 55
 <211> 225
 <212> PRT
 <213> Homo sapiens

<220>
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 <223> Xaa = Cleaved Amino Acids

<220>
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 <223> Xaa = His, Lys, Arg, Phe, Tyr, Trp

<220>
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 <223> Xaa = Asp, Glu, Lys, His, Arg

<220>
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 <222> (173)..(173)
 <223> Xaa = Ser

<400> 55

Xaa Xaa Xaa Xaa Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
 1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
 195 200 205

Leu His Arg Gly Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser
 210 215 220

Gln
 225

<210> 56
 <211> 212
 <212> PRT
 <213> Homo sapiens

<400> 56

Ala Val Pro Ser Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
 1 5 10 15

IP-022.ST25.txt

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
50 55 60

His Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Asp Ile
85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Ser Gly Gly Pro
165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His Arg Gly
210

<210> 57
<211> 212
<212> PRT
<213> Homo sapiens

<220>
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<222> (65)..(65)
<223> Xaa = His, Lys, Arg, Phe, Tyr, Trp

<220>
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 <223> Xaa = Asp, Glu, Lys, His, Arg

<220>
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 <222> (173)..(173)
 <223> Xaa = Ser

<400> 57

Ala Val Pro Ser Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
 1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
 195 200 205

Leu His Arg Gly
210

<210> 58
<211> 212
<212> PRT
<213> Homo sapiens

<220>
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<222> (65)..(65)
<223> Xaa = Ala, Asp, Asn, Cys, Glu, Gln, Gly, Ile, Leu, Met, Pro, Ser,
Thr, Val

<220>
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<222> (95)..(95)
<223> Xaa = Ala, Gly, Ile, Leu, Met, Phe, Pro, Ser, Trp, Tyr, Val

<220>
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<222> (173)..(173)
<223> Xaa = Ser

<400> 58

Ala Val Pro Ser Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140

IP-022.ST25.txt

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His Arg Gly
210

<210> 59
<211> 212
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (65)..(65)
<223> Xaa = Ala, Cys, Asp, Glu, Phe, Gly, His, Ile, Lys, Leu, Met, Asn,
Pro, Gln, Arg, Ser, Thr, Val, Trp, Tyr

<220>
<221> MISC_FEATURE
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<223> Xaa = Ala, Cys, Asp, Glu, Phe, Gly, His, Ile, Lys, Leu, Met, Asn,
Pro, Gln, Arg, Ser, Thr, Val, Trp, Tyr

<220>
<221> MISC_FEATURE
<222> (173)..(173)
<223> Xaa = Ala, Cys, Asp, Glu, Phe, Gly, His, Ile, Lys, Leu, Met, Asn,
Pro, Gln, Arg, Thr, Val, Trp, Tyr, Asx, Glx

<400> 59

Ala Val Pro Ser Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
50 55 60

IP-022.ST25.txt

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His Arg Gly
210

<210> 60
<211> 208
<212> PRT
<213> Homo sapiens

<400> 60

Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe Ile Ala Asp Val
1 5 10 15

Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu Ile Leu Asp Arg
20 25 30

His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn Gly Ser Gly Phe
35 40 45

Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala His Val Val Ala
50 55 60

IP-022.ST25.txt

Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly Asp Thr Tyr Glu
65 70 75 80

Ala Val Val Thr Ala Val Asp Pro Val Ala Asp Ile Ala Thr Leu Arg
85 90 95

Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu Gly Arg Ser Ala
100 105 110

Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly Ser Pro Phe Ala
115 120 125

Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser Ala Gln Arg Pro
130 135 140

Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu Tyr Ile Gln Thr
145 150 155 160

Asp Ala Ala Ile Asp Phe Gly Asn Ser Gly Gly Pro Leu Val Asn Leu
165 170 175

Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val Thr Ala Gly Ile
180 185 190

Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe Leu His Arg Gly
195 200 205

<210> 61
<211> 212
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(4)
<223> Xaa = Cleaved Amino Acids

<220>
<221> MISC_FEATURE
<222> (65)..(65)
<223> Xaa = His, Lys, Arg, Phe, Tyr, Trp

<220>
<221> MISC_FEATURE
<222> (95)..(95)
<223> Xaa = Asp, Glu, Lys, His, Arg

<220>
<221> MISC_FEATURE
<222> (173)..(173)
<223> Xaa = Ser

<400> 61

Xaa Xaa Xaa Xaa Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
 1 5 10 15
 Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30
 Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45
 Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60
 Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80
 Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95
 Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110
 Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125
 Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140
 Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160
 Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175
 Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 180 185 190
 Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
 195 200 205
 Leu His Arg Gly
 210

<210> 62

<211> 210

<212> PRT

<213> Homo sapiens

IP-022.ST25.txt

<400> 62

Ala Val Pro Ser Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
1 5 10 15
Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
20 25 30
Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
35 40 45
Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
50 55 60
His Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
65 70 75 80
Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Asp Ile
85 90 95
Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
100 105 110
Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
115 120 125
Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140
Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160
Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Ser Gly Gly Pro
165 170 175
Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190
Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205
Leu His
210

<210> 63
<211> 210
<212> PRT
<213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (65)..(65)
 <223> Xaa = His, Lys, Arg, Phe, Tyr, Trp

<220>
 <221> MISC_FEATURE
 <222> (95)..(95)
 <223> Xaa = Asp, Glu, Lys, His, Arg

<220>
 <221> MISC_FEATURE
 <222> (173)..(173)
 <223> Xaa = Ser

<400> 63

Ala Val Pro Ser Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
 1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 Page 62

180

185

190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
 195 200 205

Leu His
 210

<210> 64
 <211> 210
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (65)..(65)
 <223> Xaa = Ala, Asp, Asn, Cys, Glu, Gln, Gly, Ile, Leu, Met, Pro, Ser,
 Thr, Val

<220>
 <221> MISC_FEATURE
 <222> (95)..(95)
 <223> Xaa = Ala, Gly, Ile, Leu, Met, Phe, Pro, Ser, Trp, Tyr, Val

<220>
 <221> MISC_FEATURE
 <222> (173)..(173)
 <223> Xaa = Ser

<400> 64

Ala Val Pro Ser Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
 1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
 195 200 205

Leu His
 210

<210> 65
 <211> 210
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (65)..(65)
 <223> Xaa = Ala, Cys, Asp, Glu, Phe, Gly, His, Ile, Lys, Leu, Met, Asn,
 Pro, Gln, Arg, Ser, Thr, Val, Trp, Tyr

<220>
 <221> MISC_FEATURE
 <222> (95)..(95)
 <223> Xaa = Ala, Cys, Asp, Glu, Phe, Gly, His, Ile, Lys, Leu, Met, Asn,
 Pro, Gln, Arg, Ser, Thr, Val, Trp, Tyr

<220>
 <221> MISC_FEATURE
 <222> (173)..(173)
 <223> Xaa = Ala, Cys, Asp, Glu, Phe, Gly, His, Ile, Lys, Leu, Met, Asn,
 Pro, Gln, Arg, Thr, Val, Trp, Tyr, Asx, Glx

<400> 65

Ala Val Pro Ser Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
 1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 Page 64

35

40

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His
210

<210> 66
<211> 212
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (54)..(54)
<223> Xaa = Deleted Amino Acid

<220>
<221> MISC_FEATURE
<222> (65)..(65)
<223> Xaa = His, Lys, Arg, Phe, Tyr, Trp

<220>
 <221> MISC_FEATURE
 <222> (95)..(95)
 <223> Xaa = Asp, Glu, Lys, His, Arg

<220>
 <221> MISC_FEATURE
 <222> (173)..(173)
 <223> Xaa = Ser

<400> 66

Ala Val Pro Ser Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
 1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Xaa Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
 195 200 205

Leu His Arg Gly
210

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<400> 67

Ala Val Pro Ser Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Xaa Leu Ser Gly
65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
115 120 125

IP-022.ST25.txt

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His Arg Gly
210

<210> 68
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<220>
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Thr, Val

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<223> Xaa = Ala, Gly, Ile, Leu, Met, Phe, Pro, Ser, Trp, Tyr, Val

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Ala Val Pro Ser Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
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Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Xaa Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
 195 200 205

Leu His Arg Gly
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<210> 69
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Ala Val Pro Ser Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
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Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175

Xaa Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
 195 200 205

Leu His Arg Gly
210

<210> 70
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<400> 70

Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe Ile Ala Asp Val
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Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu Ile Leu Asp Arg
20 25 30

His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn Gly Ser Gly Phe
35 40 45

Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala His Val Val Ala
50 55 60

Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly Asp Thr Tyr Glu
65 70 75 80

Ala Val Val Thr Ala Val Asp Pro Val Ala Asp Ile Ala Thr Leu Arg
85 90 95

Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu Gly Arg Ser Ala
100 105 110

Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly Ser Pro Phe Ala
115 120 125

Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser Ala Gln Arg Pro
130 135 140

Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu Tyr Ile Gln Thr
145 150 155 160

Asp Ala Ala Ile Asp Phe Gly Asn Ser Gly Gly Pro Leu Val Asn Leu
165 170 175

Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val Thr Ala Gly Ile
180 185 190

Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe Leu His
195 200 205

<210> 71
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 <223> Xaa = Asp, Glu, Lys, His, Arg

<220>
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 <222> (173)..(173)
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<400> 71

Xaa Xaa Xaa Xaa Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
 1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 Page 72

130

135

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His
210

<210> 72
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<223> Xaa = His, Lys, Arg, Phe, Tyr, Trp

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<223> Xaa = Ser

<400> 72

Xaa Xaa Xaa Xaa Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
20 25 30

IP-022.ST25.txt

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
35 40 45

Gly Ser Gly Phe Val Xaa Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His Arg Gly
210

<210> 73
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<213> Homo sapiens

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<223> Xaa = His, Lys, Arg, Phe, Tyr, Trp

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<223> Xaa = Deleted Amino Acid

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<223> Xaa = Asp, Glu, Lys, His, Arg

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<223> Xaa = Ser

<400> 73

Xaa Xaa Xaa Xaa Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
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Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Xaa Leu Ser Gly
65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
165 170 175

IP-022.ST25.txt

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His Arg Gly
210

<210> 74
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<213> Homo sapiens

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<223> Xaa = Asp, Glu, Lys, His, Arg

<220>
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Xaa Xaa Xaa Xaa Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
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Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
85 90

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Xaa Val Ala Met Gly
115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
165 170 175

Leu Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
195 200 205

Leu His Arg Gly
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<210> 75
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<213> Homo sapiens

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<400> 75

Xaa Xaa Xaa Xaa Pro Pro Pro Ala Ser Pro Arg Ser Gln Tyr Asn Phe
 1 5 10 15

Ile Ala Asp Val Val Glu Lys Thr Ala Pro Ala Val Val Tyr Ile Glu
 20 25 30

Ile Leu Asp Arg His Pro Phe Leu Gly Arg Glu Val Pro Ile Ser Asn
 35 40 45

Gly Ser Gly Phe Val Val Ala Ala Asp Gly Leu Ile Val Thr Asn Ala
 50 55 60

Xaa Val Val Ala Asp Arg Arg Arg Val Arg Val Arg Leu Leu Ser Gly
 65 70 75 80

Asp Thr Tyr Glu Ala Val Val Thr Ala Val Asp Pro Val Ala Xaa Ile
 85 90 95

Ala Thr Leu Arg Ile Gln Thr Lys Glu Pro Leu Pro Thr Leu Pro Leu
 100 105 110

Gly Arg Ser Ala Asp Val Arg Gln Gly Glu Phe Val Val Ala Met Gly
 115 120 125

Ser Pro Phe Ala Leu Gln Asn Thr Ile Thr Ser Gly Ile Val Ser Ser
 130 135 140

Ala Gln Arg Pro Ala Arg Asp Leu Gly Leu Pro Gln Thr Asn Val Glu
 145 150 155 160

Tyr Ile Gln Thr Asp Ala Ala Ile Asp Phe Gly Asn Xaa Gly Gly Pro
 165 170 175

Xaa Val Asn Leu Asp Gly Glu Val Ile Gly Val Asn Thr Met Lys Val
 180 185 190

Thr Ala Gly Ile Ser Phe Ala Ile Pro Ser Asp Arg Leu Arg Glu Phe
 195 200 205

Leu His Arg Gly
 210

IP-022.ST25.txt

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 <212> PRT
 <213> Homo sapiens

<400> 76

Arg Arg Tyr Ile Gly Val Met Met Leu Thr Leu Ser Pro Ser Ile Leu
 1 5 10 15

Ala Glu Leu Gln Leu Arg Glu Pro Ser Phe Pro Asp Val Gln His Gly
 20 25 30

Val Leu Ile His Lys Val Ile Leu Gly Ser Pro Ala His Arg Ala Gly
 35 40 45

Leu Arg Pro Gly Asp Val Ile Leu Ala Ile Gly Glu Gln Met Val Gln
 50 55 60

Asn Ala Glu Asp Val Tyr Glu Ala Val Arg Thr Gln Ser Gln Leu Ala
 65 70 75 80

Val Gln Ile Arg Arg Gly Arg Glu Thr Leu Thr Leu Tyr Val Thr Pro
 85 90 95

Glu Val Thr Glu
 100

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Ala Val Pro Ser
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<210> 78
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<400> 78

Met His Lys Thr Ala Ser Gln Arg Leu Phe Pro Gly Pro Ser Tyr Gln
 1 5 10 15

Asn Ile Lys Ser Ile Met Glu Asp Ser Thr Ile Leu Ser Asp Trp Thr
 20 25 30

Asn Ser Asn Lys Gln Lys Met Lys Tyr Asp Phe Ser Cys Glu Leu Tyr
 Page 79

35

40

45

Arg Met Ser Thr Tyr Ser Thr Phe Pro Ala Gly Val Pro Val Ser Glu
50 55 60

Arg Ser Leu Ala Arg Ala Gly Phe Tyr Tyr Thr Gly Val Asn Asp Lys
65 70 75 80

Val Lys Cys Phe Cys Cys Gly Leu Met Leu Asp Asn Trp Lys Leu Gly
85 90 95

Asp Ser Pro Ile Gln Lys His Lys Gln Leu Tyr Pro Ser Cys Ser Phe
100 105 110

Ile Gln Asn Leu Val Ser Ala Ser Leu Gly Ser Thr Ser Lys Asn Thr
115 120 125

Ser Pro Met Arg Asn Ser Phe Ala His Ser Leu Ser Pro Thr Leu Glu
130 135 140

His Ser Ser Leu Phe Ser Gly Ser Tyr Ser Ser Leu Ser Pro Asn Pro
145 150 155 160

Leu Asn Ser Arg Ala Val Glu Asp Ile Ser Ser Ser Arg Thr Asn Pro
165 170 175

Tyr Ser Tyr Ala Met Ser Thr Glu Glu Ala Arg Phe Leu Thr Tyr His
180 185 190

Met Trp Pro Leu Thr Phe Leu Ser Pro Ser Glu Leu Ala Arg Ala Gly
195 200 205

Phe Tyr Tyr Ile Gly Pro Gly Asp Arg Val Ala Cys Phe Ala Cys Gly
210 215 220

Gly Lys Leu Ser Asn Trp Glu Pro Lys Asp Asp Ala Met Ser Glu His
225 230 235 240

Arg Arg His Phe Pro Asn Cys Pro Phe Leu Glu Asn Ser Leu Glu Thr
245 250 255

Leu Arg Phe Ser Ile Ser Asn Leu Ser Met Gln Thr His Ala Ala Arg
260 265 270

Met Arg Thr Phe Met Tyr Trp Pro Ser Ser Val Pro Val Gln Pro Glu
275 280 285

Gln Leu Ala Ser Ala Gly Phe Tyr Tyr Val Gly Arg Asn Asp Asp Val
 290 295 300
 Lys Cys Phe Cys Cys Asp Gly Gly Leu Arg Cys Trp Glu Ser Gly Asp
 305 310 315 320
 Asp Pro Trp Val Glu His Ala Lys Trp Phe Pro Arg Cys Glu Phe Leu
 325 330 335
 Ile Arg Met Lys Gly Gln Glu Phe Val Asp Glu Ile Gln Gly Arg Tyr
 340 345 350
 Pro His Leu Leu Glu Gln Leu Leu Ser Thr Ser Asp Thr Thr Gly Glu
 355 360 365
 Glu Asn Ala Asp Pro Pro Ile Ile His Phe Gly Pro Gly Glu Ser Ser
 370 375 380
 Ser Glu Asp Ala Val Met Met Asn Thr Pro Val Val Lys Ser Ala Leu
 385 390 395 400
 Glu Met Gly Phe Asn Arg Asp Leu Val Lys Gln Thr Val Gln Ser Lys
 405 410 415
 Ile Leu Thr Thr Gly Glu Asn Tyr Lys Thr Val Asn Asp Ile Val Ser
 420 425 430
 Ala Leu Leu Asn Ala Glu Asp Glu Lys Arg Glu Glu Glu Lys Glu Lys
 435 440 445
 Gln Ala Glu Glu Met Ala Ser Asp Asp Leu Ser Leu Ile Arg Lys Asn
 450 455 460
 Arg Met Ala Leu Phe Gln Gln Leu Thr Cys Val Leu Pro Ile Leu Asp
 465 470 475 480
 Asn Leu Leu Lys Ala Asn Val Ile Asn Lys Gln Glu His Asp Ile Ile
 485 490 495
 Lys Gln Lys Thr Gln Ile Pro Leu Gln Ala Arg Glu Leu Ile Asp Thr
 500 505 510
 Ile Leu Val Lys Gly Asn Ala Ala Ala Asn Ile Phe Lys Asn Cys Leu
 515 520 525
 Lys Glu Ile Asp Ser Thr Leu Tyr Lys Asn Leu Phe Val Asp Lys Asn
 530 535 540

IP-022.ST25.txt

Met Lys Tyr Ile Pro Thr Glu Asp Val Ser Gly Leu Ser Leu Glu Glu
545 550 555 560

Gln Leu Arg Arg Leu Gln Glu Glu Arg Thr Cys Lys Val Cys Met Asp
565 570 575

Lys Glu Val Ser Val Val Phe Ile Pro Cys Gly His Leu Val Val Cys
580 585 590

Gln Glu Cys Ala Pro Ser Leu Arg Lys Cys Pro Ile Cys Arg Gly Ile
595 600 605

Ile Lys Gly Thr Val Arg Thr Phe Leu Ser
610 615

<210> 79
<211> 604
<212> PRT
<213> Homo sapiens

<400> 79

Met Asn Ile Val Glu Asn Ser Ile Phe Leu Ser Asn Leu Met Lys Ser
1 5 10 15

Ala Asn Thr Phe Glu Leu Lys Tyr Asp Leu Ser Cys Glu Leu Tyr Arg
20 25 30

Met Ser Thr Tyr Ser Thr Phe Pro Ala Gly Val Pro Val Ser Glu Arg
35 40 45

Ser Leu Ala Arg Ala Gly Phe Tyr Tyr Thr Gly Val Asn Asp Lys Val
50 55 60

Lys Cys Phe Cys Cys Gly Leu Met Leu Asp Asn Trp Lys Arg Gly Asp
65 70 75 80

Ser Pro Thr Glu Lys His Lys Lys Leu Tyr Pro Ser Cys Arg Phe Val
85 90 95

Gln Ser Leu Asn Ser Val Asn Asn Leu Glu Ala Thr Ser Gln Pro Thr
100 105 110

Phe Pro Ser Ser Val Thr Asn Ser Thr His Ser Leu Leu Pro Gly Thr
115 120 125

Glu Asn Ser Gly Tyr Phe Arg Gly Ser Tyr Ser Asn Ser Pro Ser Asn
130 135 140

IP-022.ST25.txt

Pro Val Asn Ser Arg Ala Asn Gln Asp Phe Ser Ala Leu Met Arg Ser
 145 150 155 160
 Ser Tyr His Cys Ala Met Asn Asn Glu Asn Ala Arg Leu Leu Thr Phe
 165 170 175
 Gln Thr Trp Pro Leu Thr Phe Leu Ser Pro Thr Asp Leu Ala Lys Ala
 180 185 190
 Gly Phe Tyr Tyr Ile Gly Pro Gly Asp Arg Val Ala Cys Phe Ala Cys
 195 200 205
 Gly Gly Lys Leu Ser Asn Trp Glu Pro Lys Asp Asn Ala Met Ser Glu
 210 215 220
 His Leu Arg His Phe Pro Lys Cys Pro Phe Ile Glu Asn Gln Leu Gln
 225 230 235 240
 Asp Thr Ser Arg Tyr Thr Val Ser Asn Leu Ser Met Gln Thr His Ala
 245 250 255
 Ala Arg Phe Lys Thr Phe Phe Asn Trp Pro Ser Ser Val Leu Val Asn
 260 265 270
 Pro Glu Gln Leu Ala Ser Ala Gly Phe Tyr Tyr Val Gly Asn Ser Asp
 275 280 285
 Asp Val Lys Cys Phe Cys Cys Asp Gly Gly Leu Arg Cys Trp Glu Ser
 290 295 300
 Gly Asp Asp Pro Trp Val Gln His Ala Lys Trp Phe Pro Arg Cys Glu
 305 310 315 320
 Tyr Leu Ile Arg Ile Lys Gly Gln Glu Phe Ile Arg Gln Val Gln Ala
 325 330 335
 Ser Tyr Pro His Leu Leu Glu Gln Leu Leu Ser Thr Ser Asp Ser Pro
 340 345 350
 Gly Asp Glu Asn Ala Glu Ser Ser Ile Ile His Phe Glu Pro Gly Glu
 355 360 365
 Asp His Ser Glu Asp Ala Ile Met Met Asn Thr Pro Val Ile Asn Ala
 370 375 380
 Ala Val Glu Met Gly Phe Ser Arg Ser Leu Val Lys Gln Thr Val Gln
 385 390 395 400

IP-022.ST25.txt

Arg Lys Ile Leu Ala Thr Gly Glu Asn Tyr Arg Leu Val Asn Asp Leu
405 410 415

Val Leu Asp Leu Leu Asn Ala Glu Asp Glu Ile Arg Glu Glu Glu Arg
420 425 430

Glu Arg Ala Thr Glu Glu Lys Glu Ser Asn Asp Leu Leu Leu Ile Arg
435 440 445

Lys Asn Arg Met Ala Leu Phe Gln His Leu Thr Cys Val Ile Pro Ile
450 455 460

Leu Asp Ser Leu Leu Thr Ala Gly Ile Ile Asn Glu Gln Glu His Asp
465 470 475 480

Val Ile Lys Gln Lys Thr Gln Thr Ser Leu Gln Ala Arg Glu Leu Ile
485 490 495

Asp Thr Ile Leu Val Lys Gly Asn Ile Ala Ala Thr Val Phe Arg Asn
500 505 510

Ser Leu Gln Glu Ala Glu Ala Val Leu Tyr Glu His Leu Phe Val Gln
515 520 525

Gln Asp Ile Lys Tyr Ile Pro Thr Glu Asp Val Ser Asp Leu Pro Val
530 535 540

Glu Glu Gln Leu Arg Arg Leu Gln Glu Glu Arg Thr Cys Lys Val Cys
545 550 555 560

Met Asp Lys Glu Val Ser Ile Val Phe Ile Pro Cys Gly His Leu Val
565 570 575

Val Cys Lys Asp Cys Ala Pro Ser Leu Arg Lys Cys Pro Ile Cys Arg
580 585 590

Ser Thr Ile Lys Gly Thr Val Arg Thr Phe Leu Ser
595 600

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<213> Homo sapiens

<400> 80

Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
1 5 10

IP-022.ST25.txt

<210> 81
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<400> 81
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